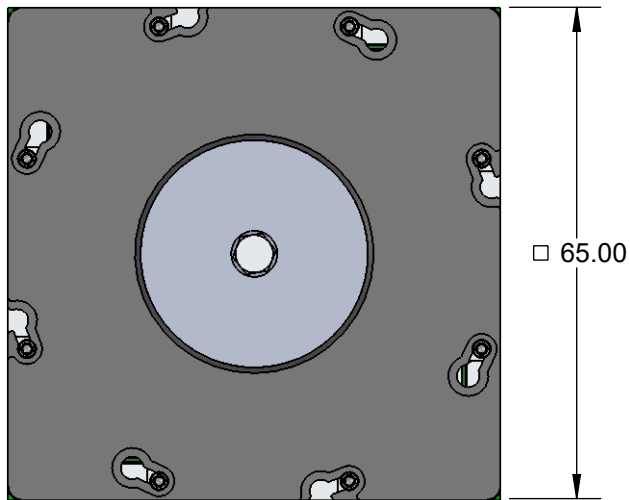


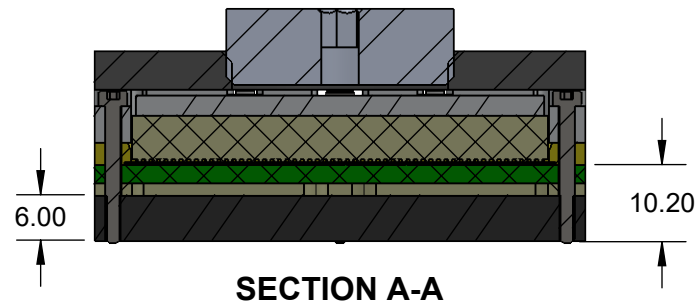
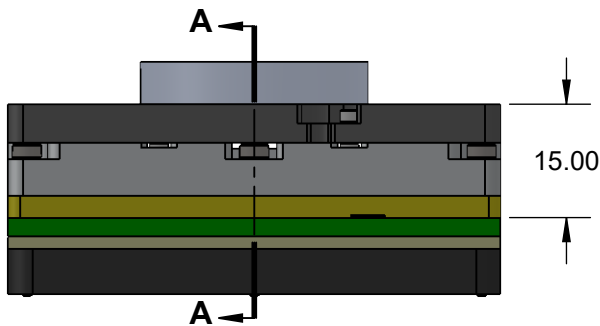
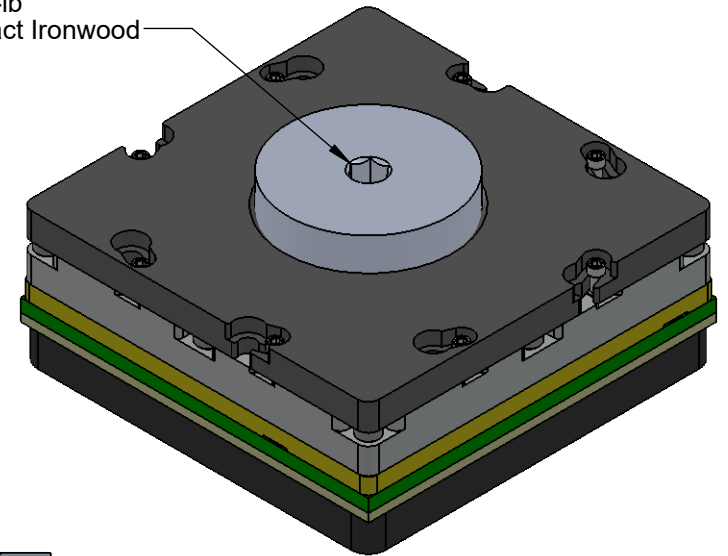
# GT-BGA DIRECT MOUNT, SOLDERLESS SOCKET

## Features

- Directly mounts to target PCB (needs tooling holes) with hardware
- High speed, reliable Elastomer connection
- Minimum real estate required
- Compression plate distributes forces evenly
- Ball guide prevents over compression of elastomer
- Easily removable swivel socket lid



Required torque= 55-65 in-lb  
Recommended Tool: contact Ironwood



## Description: GT-BGA skt 55x55mm 1mm 54x54array

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

### GT-BGA-2076 Drawing



Ironwood Electronics, Inc.  
Tele: (800) 404-0204  
www.ironwoodelectronics.com

Material: N/A  
Finish: N/A  
Weight: 233.76

STATUS: Released

ENG: S. Huang

FILE: GT-BGA-2076 Dwg

SHEET: 1 OF 4

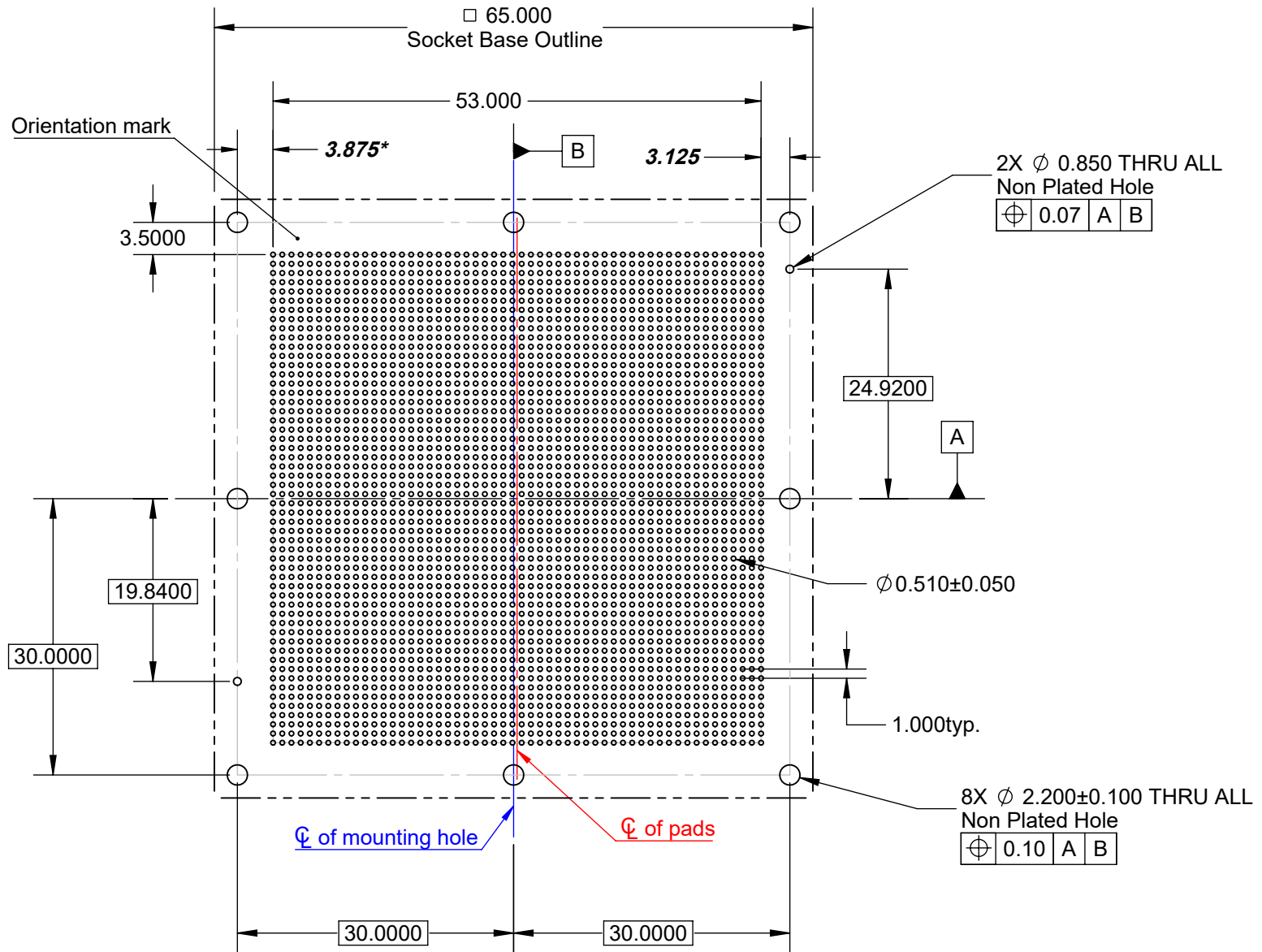
DRAWN BY: S. Huang

DATE: 12/01/2017

REV. A

SCALE: 1:1

**\*Note: BGA pattern is not symmetrical with respect to the mounting holes. It is shifted by 0.375mm to the right of center.**



## Description: Recommended PCB Layout

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

**Tolerances:** Hole diameters  $\pm 0.0254\text{mm}$  [ $\pm 0.001$ "]. Pitches (from true position)  $\pm 0.0762\text{mm}$  [ $\pm 0.003$ "]. substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.127\text{mm}$  [ $\pm 0.005$ "] unless stated otherwise. Materials and specifications are subject to change without notice.

## Target PCB Recommendations

Total thickness: 2mm min.

Plating: Gold or Solder finish

PCB Pad height: Same or higher than solder mask

### GT-BGA-2076 Drawing



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Material: N/A  
Finish: N/A  
Weight: 233.76

STATUS: Released

ENG: S. Huang

FILE: GT-BGA-2076 Dwg

SHEET: 2 OF 4

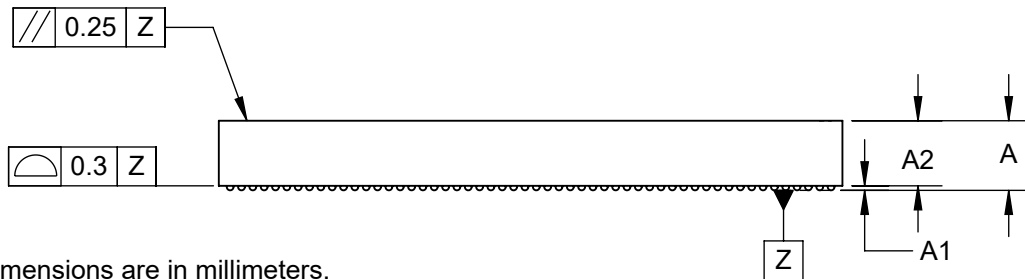
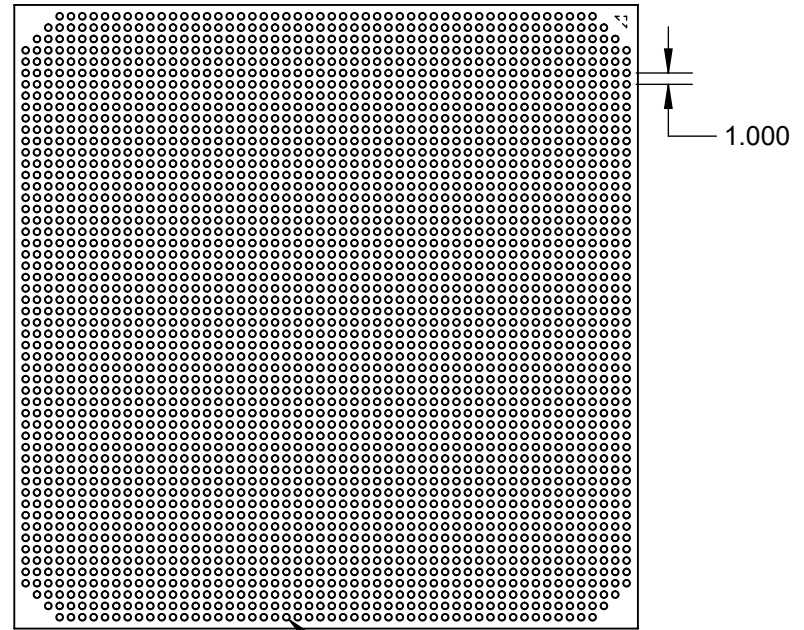
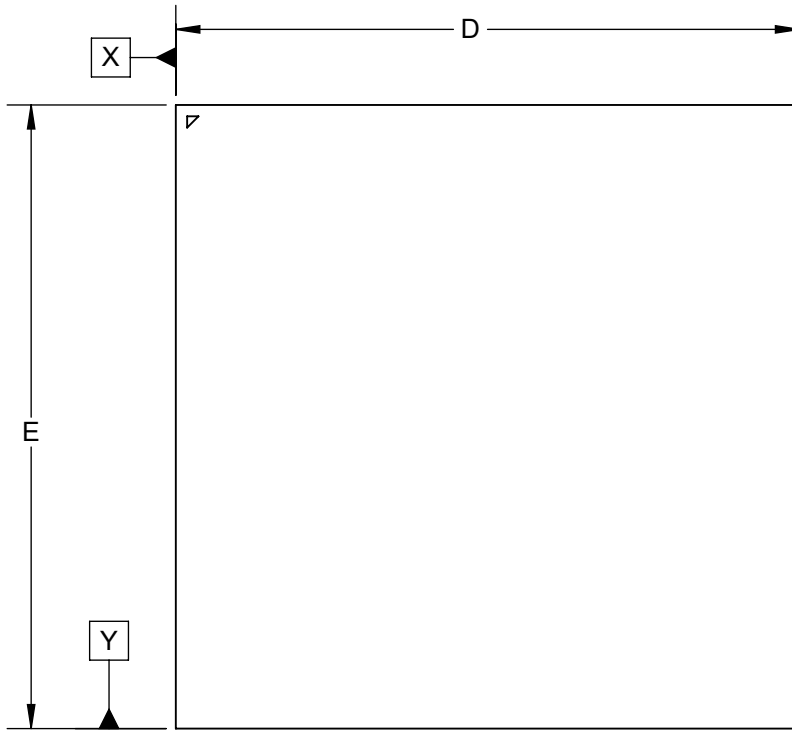
DRAWN BY: S. Huang

DATE: 12/01/2017

REV. A

SCALE: 3:2

# Ironwood Package Code: BGA2892A



$\phi$ b	$\phi$ 0.25 (M)	X	Y	Z
$\oplus$	0.10 (M)	X		


DIM	Minimum	Nominal	Maximum
A	5.94	6.24	6.54
A1	0.40	0.5	0.60
A2	5.44	5.74	6.04
b	0.50	0.6	0.70
D	55.0 BSC		
E	55.0 BSC		
e	1.00 BSC		
ARRAY	54x54		
PIN COUNT			2892

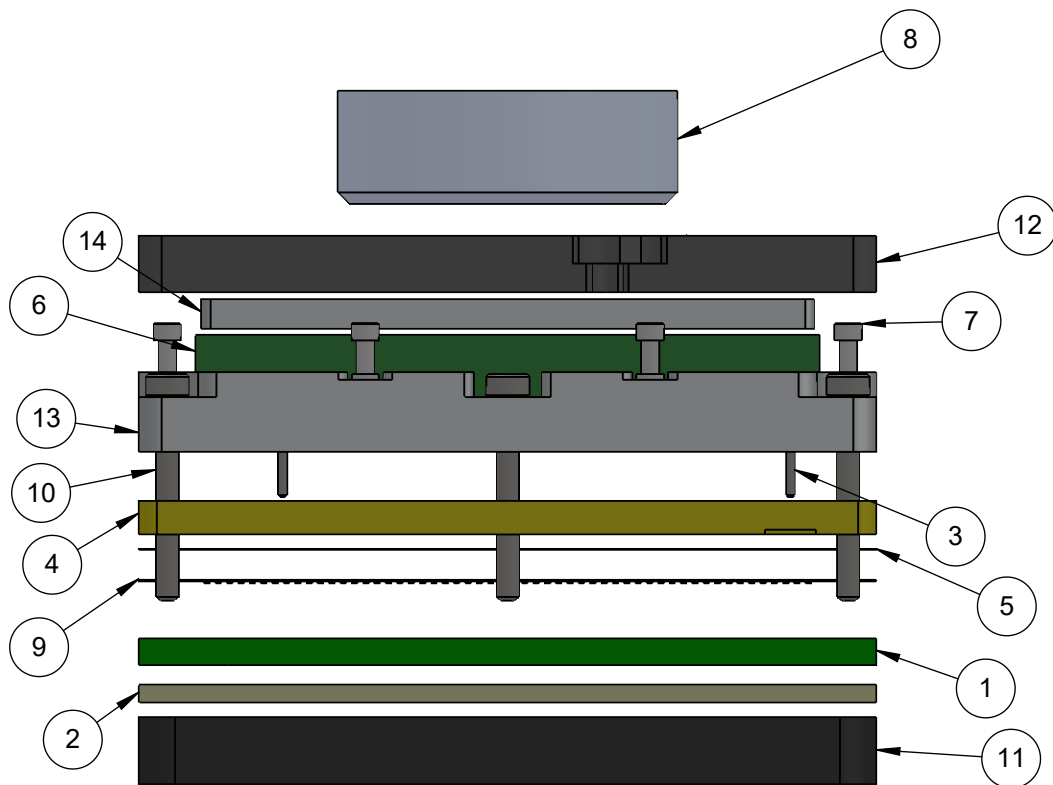
1. Dimensions are in millimeters.
2. Interpret dimensions and tolerances per ASME Y14.5M-1994.
3. Dimension b is measured at the maximum solder ball diameter, parallel to datum plane Z.
4. Datum Z (seating plane) is defined by the spherical crowns of the solder balls.
5. Parallelism measurement shall exclude any effect of mark on top surface of package.

## Description: Compatible BGA

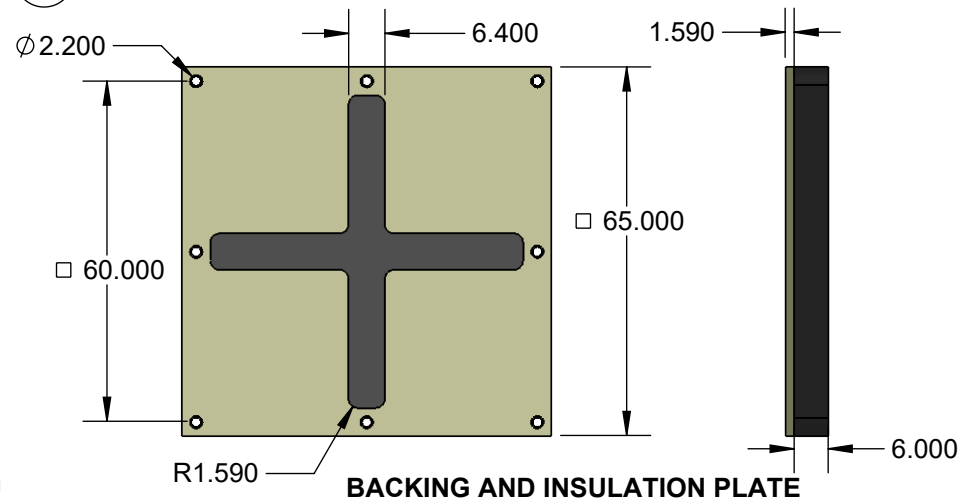
Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001$ "], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001$ "], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005$ "] unless stated otherwise. Materials and specifications are subject to change without notice.

 <b>GT-BGA-2076 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 233.76	STATUS: Released ENG: S. Huang FILE: GT-BGA-2076 Dwg	SHEET: 3 OF 4 DRAWN BY: S. Huang DATE: 12/01/2017	REV. A SCALE: 3:2




ITEM NO.	Description	Material
1	PCB 54x54array 1mm pitch	FR4
2	Insulation Plate 55mm	FR4 High temp
3	Dowel pin, 1/32" X 1/4", SS	Stainless Steel (18-8)
4	GT IC Guide 55x55mm	Torlon 4203
5	GT ball guide 55mm IC 1mm pitch 0.375mm shifting	Kapton Polyimide/Cirlex
6	BGA device 55x55mm, 54x54array 1mm pitch	High Temp FR4
7	#0-80 Shoulder Screw, 2.29mm thread length	Stainless Steel (303)
8	Compression Screw, M30 10mm Thick with 4mm diameter hole	7075-T6 Aluminum Alloy
9	GTL BGA2916 54x54 array 1mm pitch	N/A
10	Screw, M2x0.4 x 18mm, Cap, SS, Min 16mm Thread	Stainless Steel (18-8)
11	Backing Plate 55mm IC	7075-T6 Aluminum Alloy
12	Socket Lid for 55mm IC	7075-T6 Aluminum Alloy
13	Swivel Socket Base 55x55mm IC 7mm ht 0.375mm shifting	7075-T6 Aluminum Alloy
14	Compression Plate for 55mm IC	7075-T6 Aluminum Alloy



### Description: Socket Assy, Insulation Plate

Primary dimension units are millimeters, Secondary dimension units are [inches], Weight is in grams.

Tolerances: Hole diameters  $\pm 0.03\text{mm}$  [ $\pm 0.001"$ ], Pitches (from true position)  $\pm 0.025\text{mm}$  [ $\pm 0.001"$ ], substrate thickness tolerance  $\pm 10\%$ , all other tolerances  $\pm 0.13\text{mm}$  [ $\pm 0.005"$ ] unless stated otherwise. Materials and specifications are subject to change without notice.

 <b>GT-BGA-2076 Drawing</b> Ironwood Electronics, Inc. Tele: (800) 404-0204 www.ironwoodelectronics.com	Material: N/A Finish: N/A Weight: 233.76	STATUS: Released	SHEET: 4 OF 4	REV. A
		ENG: S. Huang	DRAWN BY: S. Huang	SCALE: 3:2
		FILE: GT-BGA-2076 Dwg	DATE: 12/01/2017	